

REMARKS

Claims 1, 4-7 and 9-20 are pending in the application, claims 2 and 3 being canceled by this amendment, new claims 14-20 being added by this amendment. Claim 8 was previously canceled by the Amendment filed November 21, 2003. Reconsideration and withdrawal of the rejections in view of the amendments and remarks are kindly requested.

SUMMARY OF EXAMINER INTERVIEW

Initially, Applicants' representative wishes to thank Examiners Tran and Ton for their time and effort at the Interview of February 11, 2004 the content of which is summarized below.

Prior to the Interview, Applicants' representative forwarded the Examiner some proposed discussion points and arguments for the Interview. At the interview, Applicants' representative discussed the invention, the references applied and arguments. Certain clarifying amendments were discussed between the examiners and Applicants' representative to define over Nevo. No agreement was reached, absent an amendment by Applicant along the lines discussed in the interview. Accordingly, Applicants have filed amendments similar to those discussed in the Interview in an effort to further distinguish Nevo.

REJECTION UNDER 35 U.S.C. § 102

The Examiner alleges that claims 1-7 and 9-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nevo (U.S. Patent No. 6,320,873). This rejection is respectfully traversed.

Applicant respectfully submits that Nevo fails to teach or suggest a method of communicating between a wireless unit and a packet data network comprising, at least sending a setup packet as secondary traffic over the established circuit switched link between the wireless unit and the base station, in combination with sending data packets for a data session over a packet-switched link between the wireless unit and packet data network on a wireless resource that has been temporarily allocated in

response to a request for a wireless resource to send data packets for said data session, as recited in claim 1.

The GSM network of Nevo requires a service node to establish a link between a mobile station and a packet data network, and does not describe the actual sending of a setup packet over an already established circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network over a packet-switched link. In particular, Nevo requires substantial mapping of GPRS frames onto CDMA air interfaces, which is not a focus, nor required, by the present application.

The Examiner relies on Col. 1 lines 54-55, col. 5, lines 50-54, col. 6, lines 40-42, and FIG. 4, for alleging that Nevo teaches sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network over a packet-switched link. Each of these passages is provided below.

Col. 1 lines 54-55:

Generally speaking, because GSM was developed primarily for circuit-switched transmission, it is not well suited for packet-switched data, as is commonly transmitted over the Internet.

This passage says nothing about sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network. This passage is directed to the problems in using a circuit-switched link for burst transmission.

Col. 5, lines 50-54:

Communications between CDMA BSS 32 and MS 40 are based on a CDMA radio "air interface," which is preferably based on the IS95 standard for CDMA communications, and most preferably on the TIA/EIA-95-B version of the standard. BSS 32 is built around a base station controller (BSC) 34, which controls and communicates with a number of base station transceivers (BTS) 36.

This passage describes the air interface used between BS and MS in a CDMA system. Nothing related to sending of a setup packet over an established circuit switched link is described in the passage above.

Col. 6, lines 40-42:

MS 40 communicates with CDMA BSS 32 over a CDMA Um interface, based on the CDMA IS-95 air interface, which is modified to support GSM and GPRS signaling standards.

This is a standard protocol (Um) used between MS and BSS. This has nothing to do with sending a setup packet over an already established circuit switched link.

The setup packet is not a call initiated from the MS to initiate communication. In the present invention, the link is already established between wireless unit and base station. Data session setup time may be reduced by sending the TCP setup packets as secondary traffic over the already established circuit switched link in the voice circuit frames. As such, delay associated with requesting and being allocated wireless resources to setup a data session is reduced.

This is not foreseen anywhere in Nevo et al., because Nevo is directed to a mobile station that may be configured for conducting general operations with a circuit switched network and general operations with a separate packet data network.

Nevo says nothing about using an established circuit switched link to send setup packets to establish a data session between the mobile station and the packet data network. For at least the above reasons, Applicants submit that the claims are allowable.

Rejections-Background of the Art

Applicants rebut the Examiner's position by pointing out explicitly relied upon sections of the Background.

Page 3, lines 25-29 This passage is alleged as teaching the sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a

data session between a wireless unit and a packet data network over a packet-switched link.

Fig. 1 shows a general block diagram of a wireless communication system 100 with access to a public switched telephone network 102 (PSTN) and a packet data network 104. The wireless system comprises a set of interconnected mobile switching centers (MSCs) 106, each supporting a number of cell sites 108. A wireless unit 110 can establish a voice call using a circuit switched link between the wireless unit and the base station as part of the circuit switched path with another device, such as a wireless unit 110 or a landline terminal in the PSTN 102.

FIG. 1 shows the basic system structure and also explains the basics behind establishing a circuit switched path between a wireless unit and a base station. FIG. 1 does not indicate that an already established circuit switched link is being used for sending setup packets.

Page 4, lines 14-23, page 5 lines 3-4: This passage is alleged to teach the sending data packets for said data session over a packet switched link between said wireless unit and said packet data network on a wireless resource that has been temporarily allocated in response to a request for a wireless resource to send data packets for said data session. The recited feature of claim 1 requires that the data session is already set up over the circuit switched link.

The wireless units 110 communicate with packet data networks 104 by establishing packet switched connections over the wireless network with the PDN 104. Multiple packet switched connections share wireless network resources to establish a packet switched path between the wireless units 110 and the PDN 104. A packet switched link is established between the wireless units 110 and the base station 108 by a burst management system which coordinates the sharing of available wireless resources, such as wireless channels, among multiple packet switched connections. In current cellular CDMA systems, the fundamental channel and/or one or more supplemental channels can be temporarily assigned to packet switched connections to form the packet switched link . . .

The burst management system collates the burst requests and temporarily assigns the available wireless resources to the packet switched connection.

The indented passage above shows how to generally set up a packet switched connection. However, the relied on passage provides no discussion, whatsoever, about sending data packets for a data session over a packet-switched link . . . on a wireless resource that has been temporarily allocated in response to a request for a wireless resource to send data packets for said data session. For at least this additional reason, the rejection fails. The Examiner is asked to please reconsider his position in light of these distinctions.

Dependent Claim Distinctions

Various features in the dependent claims are not taught by Nevo. Nevo is silent on any teaching of multiplexing a setup packet with a traffic frame, or with a voice frame over a circuit switched link, as recited in claims 4 and 5. Nevo fails to teach or suggest the use of temporary assignments of supplemental channels as the wireless resource for sending data packets for a data session as recited in claim 9. Nevo thus fails to teach each and every element of dependent claims 4, 5 and 9. The Examiner is asked to please reconsider his position in light of these distinctions, and to withdraw the rejection as pertaining to these claims for this additional reason.

NEW CLAIMS

New claims 14-20 have been added in an effort to provide further protection for Applicant's invention. Applicant submits that new claims 14-20 are allowable at least for reasons somewhat similar to those set forth above regarding claim 1, and/or for the further features claimed therein.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1, 4-7 and 9-20 in connection with the present application is earnestly solicited.

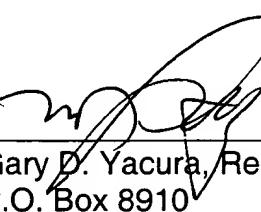
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew J. Lattig, Reg. No. 45,274 at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By
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